EPA comments on the Revised SLERA
Columbia Falls Aluminum Company NPL Site
Columbia Falls, Montana
Prepared for Columbia Falls Aluminum Company, LLC by Roux Associates, Inc.
Dated August 15, 2017

Overall, the comments initially submitted and discussed are satisfactorily addressed in the revised SLERA. Below is a summary of the initial comment submitted and an additional comment regarding the revisions to the SLERA (blue text).

Specific Comments

Original Comment: Section 3.3.4 (Page 22) – Identified Exposure Pathways – It is suggested that a figure be created to summarize the site conceptual model for ecological exposures and how the various pathways are being evaluated. Will surface water ingestion by wildlife receptors be evaluated in future risk assessments?

> Additional comment: The addition of the conceptual site model (CSM) is very helpful to gain an understanding of the pathways that are complete and for what receptors. The original comment was addressed by creating the CSM. However, upon review it is noted that exposure to subsurface soil for burrowing mammals is not considered a complete pathway. Although subsurface soil is not evaluated in the SLERA, it should be retained for evaluation in the BERA. For this reason, the CSM should be revised to include subsurface soil as a complete pathway for burrowing mammals.
>
> It was also noted that sediment has not been included as a potentially impacted environmental media (i.e., pathway for evaluation) in the CSM. Sediment should be added as a complete exposure pathway (via direct contact/ingestion) for benthic invertebrates.

Original Comment: Section 4.4.2 (Page 33) – Surface Water COPEC Selection – Please clarify if total or dissolved fraction was used to compare to screening levels. Were dissolved concentrations of metals compared to Montana DEQ standards? Please clarify how hardness-dependent chemicals were evaluated. Was there an assumed hardness that was used? If so, how was the value selected? Please clarify of acute or chronic screening values are being used in the COPEC selection. It does not appear that detection limit adequacy is being evaluated as outlined in the SLERA. For example, in Table 5, mercury is not being carried through as a COPEC even though results were non-detect at a level that is more than two times the screening level. Similar to sediment, it does not appear that the lowest screening value has been selected or that all sources have been considered. To aid in the evaluation of the selected screening values, please provide a table showing the values from all sources and the selected screening value.

> Additional comment: The original comment was addressed satisfactorily. It was noted that the minimum hardness used for developing screening values for chemicals with hardness-based toxicity values. While this is appropriate for this evaluation. It should be noted that the minimum hardness should be re-evaluated at the time that all four rounds of data are used for COPC selection (i.e., it is possible the minimum value will decrease and this value should be used in subsequent screening). No action is needed at this time to revise the text.

Section 4.4.3 (Page 35) – Soil COPEC Selection - Again, it does not appear that the lowest screening value has been selected or that all sources have been considered. To aid in the evaluation of the selected screening values, please provide a table showing the values from all sources and the selected screening value. Some of the soil tables do not result in a COPEC selection (e.g., Table 19). It is unclear what the potential COPECs are without doing a visual scan of the table of results and the screening values.

Additional comment: It remains unclear in Appendix B3 which values have been selected for use in screening. Appendix B1 and Appendix B2 have this selection presented (see the last two columns on the right in each of these appendices). Please add two columns to the far right in Appendix B3 to display the selected screening values and sources. Also, it appears that visually selecting the minimum value in Appendix B3 for some chemicals does not result in the value used for screening in Tables 10-21 (e.g., the minimum value for zinc in Appendix B3 is 12, while 6.62 is used for screening in the tables). Please confirm the values in Appendix B3 and Tables 10-21 are correct. Also, because it does not appear the sources have been decoded in Tables 1-21, only letters are provided (e.g., "A"), it is unclear what sources have been selected for use in screening data without referring to the appropriate appendix. Can a key be provided for each table? Please also clarify what is meant by "background". It is unclear what this means in the screening process as it is not appropriate to consider background concentrations during COPC selection.

It also may be more useful to segregate the screening for plants/soil invertebrates and birds/mammals recognizing that baseline risk calculations for these receptor groups is performed in a different manner. This is just a suggestion, it is not critical to separate the screening in this way at this time.